

ABSTRACT OF THE DISCLOSURE

A feed system for a strapping machine automatically detects a strap error or fault, stops strap retraction or take-up and refeeds the strap into the strapping head following that error or fault. The system is used in a strapping machine of the type having a strap supply, a strap chute and a strapping head disposed between the supply and the chute. The feed system includes a strap path from the supply to the head, a pair of tensioning wheels disposed along the strap path proximal the strap supply and a pair of feed wheels disposed along the strap path proximal the strapping head. The feed wheels define a nip therebetween. A feed wheel drive is operably connected to one of the feed wheels and a tensioning wheel drive is operably connected to one of the tensioning wheels. A sensor is disposed along the strap path for generating a signal to indicate a movement or a lack of movement of the strap along the strap path. In a strapping cycle, the strap material is conveyed around the strap chute by forward rotation of the feed wheels, is retracted around the load by reverse rotation of the feed wheels and is tensioned around the load by forward rotation of the tensioning wheels. Forward rotation of the tensioning wheels commencing upon receipt of the lack of movement of strap material signal following retracting the strap material. When, following reverse rotation of the feed wheels for retracting the strap, in a faulted strap condition, the sensor fails to generate a lack of movement signal, the feed wheels stop rotation, and the tensioning wheels rotate in a reverse direction to convey the strap material into the nip between the feed wheels.